

AMENDMENTS TO THE CLAIMS:

Claim 1. (canceled)

2. (previously presented): A communication system having a plurality of node devices for communicating with a terminal, said terminal may move among said plurality of node devices and register its location with said communication system, said location being an address of a destination node device accommodating said terminal, comprising:

a location registering server for registering the location of said terminal;

a node device that receives a packet destined for said terminal and transfers said packet to the destination node device when knowing the address of the destination node device, while otherwise transferring the packet to the destination node device by referring to the location registering server; and

a transfer sequence; wherein when the node device does not know the address of the destination node device,

the received packet is transferred to the destination node device by the node device forwarding the received packet to the location registering server which forwards the packet to the destination node device by referring to a location registering table.

3. (original): The communication system as claimed in claim 2 wherein the location registering server further forwards the address of the destination node device to the node device.

4. (previously presented): The communication system as claimed in claim 3 wherein the node device forwards a received subsequent packet directly to said destination node device.

5. (previously presented) A communication system having a plurality of node devices for communicating with a terminal, said terminal may move among said plurality of node devices and register its location with said communication system, said location being an address of a destination node device accommodating said terminal, comprising:

a location registering server for registering the location of said terminal;

a node device that receives a packet destined for said terminal and transfers said packet to the destination node device when knowing the address of the destination node device, while otherwise transferring the packet to the destination node device by referring to the location registering server;

a source node device being an originating node device of said received packet;

and

a transfer sequence; wherein when the node device does not know the address of the destination node device, the received packet is once sent back to the source node device by the node device, and by referring to the location registering server the packet is transferred to the destination node device.

6. (original): The communication system of claim 5 wherein the source node device obtains the address of the destination node device from the location registering server and transfers the packet to the destination node device.

7. (original): The communication system of claim 5 wherein when the received packet is being once sent back to the source node device, the received packet is transferred by the node device to the location registering server which forwards the received packet back to the source node device.

8. (original): The communication system as claimed in claim 5 wherein the location registering server further forwards the address of the destination node device to at least one of the source node device and the node device.

9. (previously presented): A communication system having a plurality of node devices for communicating with a terminal, said terminal may move among said plurality of node devices and register its location with said communication system, said location being an address of a destination node device accommodating said terminal, comprising:

a location registering server for registering the location of said terminal;

a node device that receives a packet destined for said terminal and transfers said packet to the destination node device when knowing the address of the destination node device, while otherwise transferring the packet to the destination node device by referring to the location registering server;

a source node device being an originating node device of said received packet;

and

a transfer sequence, wherein when the node device does not know the address of the destination node device, the received packet is once sent back to the source node device by the node device, the source node device transfer the packet to the location registering server,

which further transfers the received packet to the destination node device by referring to a location registering table.

10. (original): The communication system of claim 9 wherein when the received packet is being once sent back to the source node device, the received packet is transferred by the node device to the location registering server which forwards the received packet back to the source node device.

11. (original): The communication system as claimed in claim 9 wherein the location registering server further forwards the address of the destination node to the source node device.

12.(original): The communication system of claim 9 wherein the location registering server further forwards the address of the destination node device to the node device.

13. (previously presented) The communication system of claim 2, further comprising:

a transfer sequence, wherein when the node device does not know the address of the destination node device, the address of the destination node device is obtained from the location registering server so that the received packet is transferred by the node device to the destination node device at the obtained address.

14.(original): The communication system of claim 13 further comprising;  
a sender node device being a node device that sent the packet, wherein  
said node device further notifies the sender node device of the address  
of the destination node device.

15.(previously presented): The communication system of claim 2, wherein said  
node device further comprising:

a storage portion for storing an address of the terminal and the address of  
the destination node device in correspondence with each other, and  
a transfer portion for transferring the received packet to the destination  
node device when the terminal is not being accommodated by the node device.

16. (original): The communication system as claimed in claim 15 wherein the  
node device continues transferring packets to the destination node device after the  
received packet until a predetermined time elapses or a finish of the packet transfer is  
instructed.

17. (original): A communication system having a plurality of node devices for  
communicating with a terminal, said terminal may move among said plurality of node  
devices, comprising:

a destination node device being a node device of said plurality of node  
devices that is accommodating the terminal and facilitating communication between the  
terminal and the communication system; and

a former node device being a node device of said plurality of node devices that previously accommodated the terminal; wherein

the destination node device obtains an address of the former node device and notifies the former node device of an address of the destination node device and an address of the terminal.

18. (original): The communication system of claim 17 wherein the terminal comprises:

a storage portion for storing the address of the former node device; wherein

the destination node device receives the address of the former node device stored in the storage portion and by way of the received address of the former node device notifies the former node device of the addresses of the destination node device and the terminal.

19. (original): The communication system of claim 18 wherein the storage portion of the terminal stores the address of the former node device with which the terminal has first started communication during a communication session.

20. (original): The communication system of claim 18 wherein the storage portion of the terminal stores all addresses of former node devices servicing areas where the destination terminal has been located from a communication start to a present time, and

the destination node device receives said all addresses from the storage portion of the terminal to notify all of the former node devices of the addresses of the destination node device and the terminal.

21. (original): The communication system of claim 18, said destination node device further comprising:

a storage portion for storing the address of the former node device and the address of the terminal in correspondence with each other, and

the destination node device notifying the former node device, by referring to its storage portion, of an address of a new destination node device, when the terminal has moved from an area in which the destination node device accommodates the terminal to an area of a new destination node device, said new destination node device having the area where the terminal is located at present, and

the new destination node device has notified the destination node device of the address of the new destination node device and the address of the terminal.

22. (original): A communication system having a plurality of node devices for communicating with a terminal, said terminal may move among said plurality of node devices, comprising:

a destination node device being a node device of said plurality of node devices that is accommodating the terminal and facilitating communication between the terminal and the communication system;

a former node device being a node device of said plurality of node devices that previously accommodated the terminal; and

a location registering server having a location registering table and for notifying the former node device of the address of the destination node device and the address of the terminal based on the address of the former node device registered in the

location registering table, the address of the former node device being registered in the location registering table before receiving a location registration request from the destination node device and the terminal.

23. (original): A communication system having a plurality of node devices for communicating with a terminal, said terminal may move among said plurality of node devices, comprising:

a destination node device being a node device of said plurality of node devices that is accommodating the terminal and facilitating communication between the terminal and the communication system;

a former node device being a node device of said plurality of node devices that previously accommodated the terminal; and

a location registering server having a location registering table,

wherein the location registering server registers the location of a first destination node device, being a node device with which the terminal has first started communication during a communication session, and

when receiving a location registration request of a latest destination node device and the terminal, during the communication session, the location registering server does not register the latest destination node device in the location registering table, and

notifies the first destination node device of the address of the latest destination node device and the terminal.



24. (original): The communication system of claim 17, the communication system further comprises:

a location registering server, wherein

the destination node device obtains, from the location registering server, the address of the former node device to notify the former node device of the addresses of the destination node device and the terminal.

25. (original): The communication system of claim 24 wherein

the destination node device, when the terminal has moved to an area accommodated by the destination node device and before making a location registration of the terminal, obtains from the location registering server the address of the former node device to notify the former node device of the addresses of the destination node device and the terminal, the former node device having an area where the terminal was located before.

26. (original): The communication system of claim 17, the communication system further comprises:

a location registering server which further comprises:

a storage portion for storing the address of the former node device, wherein

the location registering server notifies the former node device of the address of the destination node device to which a location registration request from the terminal is being made.

27. (original): The communication system of claim 17, the communication system further comprises:

a location registering server which further comprises:

a storage portion for storing the address of the former node device,

wherein

while the terminal continues a communication session the storage portion of the location registering server stores the address of the first former node device being a node device where the terminal started the communication session, and

the destination node device notifies the first former node device of the addresses of the destination node device and the terminal.

28. (original): The communication system of claim 17, the communication system further comprises:

a location registering server which further comprises:

a storage portion for storing all addresses of former node devices

where the terminal has been located from a communication start to a present time, and

the location registering server notifies all of the former node devices of the address of the destination node device and the address of the terminal.

29. (original): The communication system of claim 17, the communication system further comprises:

a location registering server which further comprises;

a storage portion for storing the address of the former node device, wherein the destination node device receives the address of the former node device from the location registering server, when the terminal has moved to an area accommodated by the destination node device, to notify the former node device of the addresses of the destination node device and the terminal.

30. (original): The communication system of claim 17, the communication system further comprises:

a location registering server which further which further comprises :

a storage portion for storing the address of the former node device, wherein while the terminal continues a communication session the storage portion of the location registering server stores the address of the first former node device being a node device where the terminal started the communication session, and

the destination node device notifies the first former node device of the addresses of the destination node device and the terminal.

31. (original): The communication system of claim 17, the communication system further comprises:

a location registering server which further comprises:

a storage portion for storing the address of the former node device, wherein the storage portion of the location registering server stores all addresses of former node devices where the terminal has been located from a communication start to a present time, and

the destination node device notifies all of the former node devices of the addresses of the destination node device and the terminal.

32. (original): A communication system having a plurality of node devices for communicating with a terminal and a location registering server, said terminal may move among said plurality of node devices and register its location with the location registering server, comprising:

a destination node device being a node device of said plurality of node devices that is accommodating the terminal and facilitating communication between the terminal and the communication system;

a sender node device being a node device of said plurality of node devices that sends or forwards a packet to a node device of said plurality of node devices; and

a transfer sequence, wherein the node device receiving the packet notifies the sender node device of an address of the destination node device and an address of the terminal when knowing the address of the destination node device, while otherwise notifying the location registering server whereby the address of the destination node device and the address of the terminal registered in the location registering server is provided to the sender node device.

33. (original): The communication system of claim 32 wherein the sender node device is a node device that received the packet from a sending terminal.

34. (original): The communication system of claim 32, wherein the node device further comprising:

a storage portion for storing the address of the destination node device,

wherein

the node device notifies the sender node device of the address of the destination node device and an address of the terminal by referring to the storage portion.

35. (original): The communication system of claim 32 wherein

the node device transfers the received packet to the location registering server and requests the location registering server to notify the sender node device of the address of the destination node device and an address of the terminal.

36. (original): The communication system of claim 32 wherein

the node device transmits, to the location registering server, a message for requesting the location registering server to notify the sender node device of the address of the destination node device and an address of the terminal.

37. (original): The communication system of claim 32 wherein

the node device obtains the address of the destination node device from the location registering server and notifies the sender node device of the address of the destination node device and an address of the terminal.

38. (original): A communication system having a plurality of node devices for communicating with a terminal, said terminal may move among said plurality of node devices comprising:

a destination node device being a node device of said plurality of node devices that is servicing an area where the terminal is located and having an address;

a sender node device being a node device of said plurality of node devices that sends or forwards a packet and having an address; and

a transfer sequence, wherein the destination node device notifies a sender node device of its own address and an address of the terminal based on an address stored in a storage portion provided in at least one of the terminal and the destination node device.

39. (original): The communication system of claim 38 wherein the terminal has a storage portion for storing the address of the sender node device, and

the destination node device receives the address of the sender node device from the terminal to notify the sender node device of its own address and the address of the terminal.

40. (original): The communication system of claim 38, further comprising:

a location registering server; wherein

the terminal has a storage portion for storing an address of a source terminal, and

the destination node device transmits, to the location registering server, a message including the source terminal address received from the terminal and its own address, and requests

the location registering server to notify the sender node device of the addresses of the destination node device and the terminal.

41. (original): The communication system of claim 38, further comprising:

a location registering server; wherein

the destination node device has a storage portion for storing the address of the sender node device,

when the terminal has moved to an area not serviced by the destination node device, the destination node device receives, from a latest node device, being a node device servicing an area to which the terminal has moved, an address of the latest node device and the address of the terminal through the location registering server, the destination node device notifies the sender node device of the addresses of the latest node device and the terminal.

42. (original): The communication system of claim 38, wherein the terminal has a storage portion for storing an address of a node device servicing an area where the terminal was located, and

the node device having a storage portion for storing the address of the sender node device, wherein the node device receives, from the destination node device, the addresses of the destination node device and the terminal, and the node device notifies the sender node device of the addresses of the destination node device and the terminal.

43. (original): The communication system of claim 38, further comprising:

a location registering server;

the terminal having a storage portion for storing an address of a node device servicing an area where the terminal was located; and

the node device having a storage portion for storing an address of a source terminal, wherein

the destination node device transmits a message to the node device including its own address and the address of the terminal, based on the address stored in the storage portion of the terminal,

the node device receives said message and transmits, to the location registering server, a message including the address of the destination node device, the address of the terminal, and the address of the source terminal stored in the storage portion of the node device, and requests the location registering server to notify the sender node device servicing the source terminal of the addresses of the destination node device and terminal.

44.(original): The communication system of claim 38, further comprising:

a location registering server, having a storage portion for storing the address of the sender node device, wherein

when the terminal moves to an area serviced by the destination node device the destination node device transmits, to the location registering server, a message including its own address and the address of the terminal, and requests the location registering server to notify the sender node device of the addresses of destination node device and the terminal.



45. (original): The communication system of claim 38, further comprising:

a location registering server, having a storage portion for storing an address of the sender node device, wherein

when the terminal moves to an area serviced by the destination node device the destination node device transmits an inquiry to the location registering server requesting the address of the sender node device, and the destination node device directly notifies the sender node device of its own address and the address of the terminal.

46. (original): The communication system of claim 38, further comprising:

a location registering server, having a storage portion for storing an address of a source terminal in correspondence with the address of the terminal, wherein

when the terminal moves to an area serviced by the destination node device the destination node device transmits, to the location registering server, a message including its own address and the address of the terminal, and requests the location registering server to notify the sender node device of the addresses of destination node device and the terminal.

47. (original): The communication system of claim 46, further comprising:

a plurality of location registering servers, wherein when the location registering server receives the message from the destination node device and the location registering server does not have the address of the source terminal stored in its storage portion, the location registering server requests another location registering server in which

the source terminal is registered to notify the sender node device of the addresses of the destination node device and the terminal.

48. (original): The communication system of claim 38, further comprising:

a location registering server, having a storage portion for storing an address of a source terminal in correspondence with the address of the terminal, wherein

when the terminal moves to an area serviced by the destination node device the destination node device receives from the location registering server an address of the source terminal and an address of a source node device servicing the area where the source terminal is located, and directly transmits, to the sender node device, its own address and the address of the terminal.

49. (previously presented): The communication system of claim 2, wherein the terminal having a storage portion included in an adapter connected to the terminal.

50. (previously presented): The communication system of claim 2, wherein a packet transmitted/ received between the plurality of node devices designates to the destination node device at least one of a necessity of a transfer of its own packet, a transfer destination, a necessity of a response message, and a response destination.

51. (currently amended): A communication system of having a plurality of, node devices for communicating with a terminal, said terminal may move among said Plurality of node devices

and register its location with said communication system, said location, being an address of a destination node device accommodating said terminal, comprising:

a location registering server for registering the location of said terminal; and

a node device that receives a packet destined for said terminal and transfers said packet to the destination node device when knowing the address of the destination node device, while otherwise transferring the packet to the destination node device by referring to the location registering server;

wherein a message transmitted/received between the plurality of node devices designates, to the destination node device, at least a necessity of a response message and a response destination.

52. (previously presented): The communication system of claim 2, further comprising:

a plurality of location registering servers; and

the node device having a server retrieval table for providing a correspondence between the terminal and an address of a location registering server where a terminal location registration is made.

53. (previously presented): The communication system of claim 2, wherein the node device is connected to a router to compose the communication system.

54. (previously presented): The communication system of claim 2, wherein the node device is connected with an ATM-SWITCH to compose the communication system.

55. (previously presented): The communication system of claim 2, further comprising a plurality of terminals, wherein at least one of the terminals has a fixed terminal, and at least one of the node devices has a node device for a fixed communication network.

56-80. (canceled)